

# Pinnacle Peak West ADMS: Tonight's Agenda

- 6:00 – 6:15 pm  
Open House
- 6:15 – 6:45 pm  
Presentation
- 6:45 – 8:00 pm  
Open House





# **PINNACLE PEAK WEST AREA DRAINAGE MASTER STUDY**

September 16, 2014 Community Meeting

# Presentation Agenda

- Study Information & Results
- Public Input
- Next Steps



# PPW ADMS Characteristics:

95 square miles

## Jurisdiction

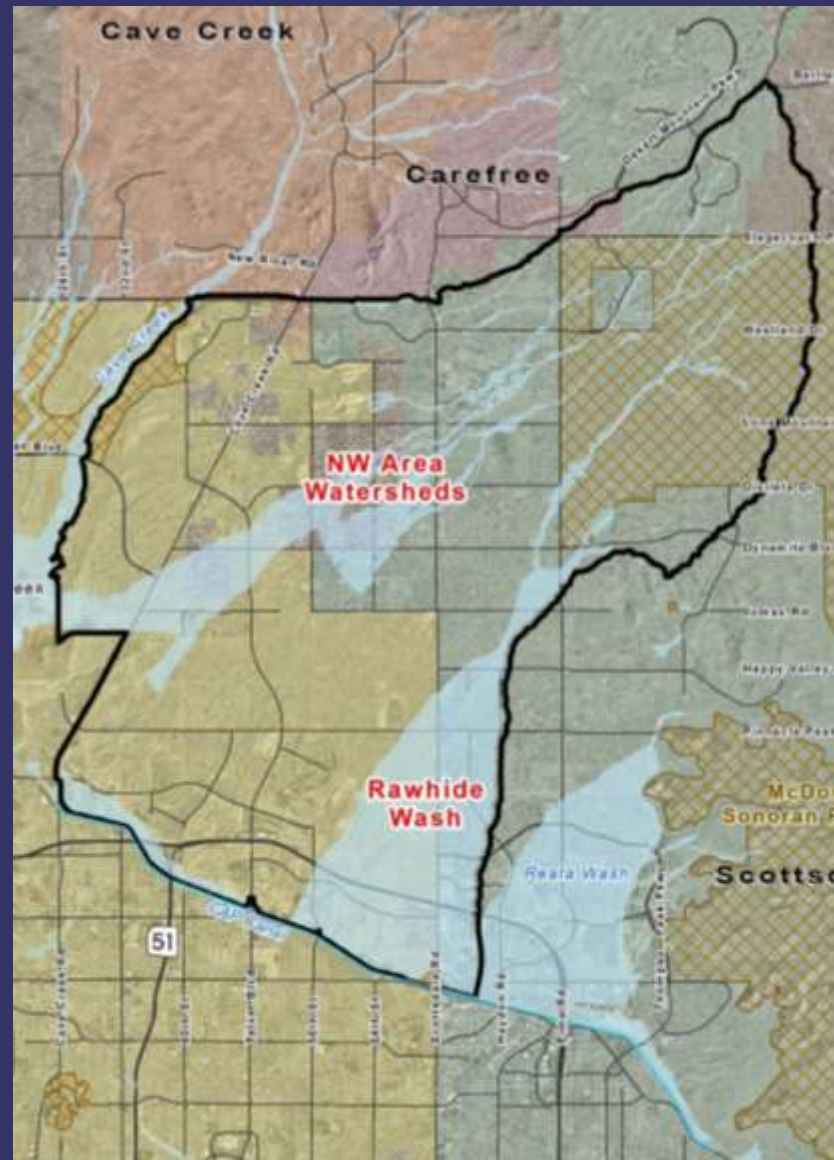
Scottsdale	46%
Phoenix	45%
Unincorporated	8%
Other	1%

## Land Ownership

Private	48.7%
AZ State Land	41.4%
Federal	3.8%

## Project Partners

## Existing Floodplains

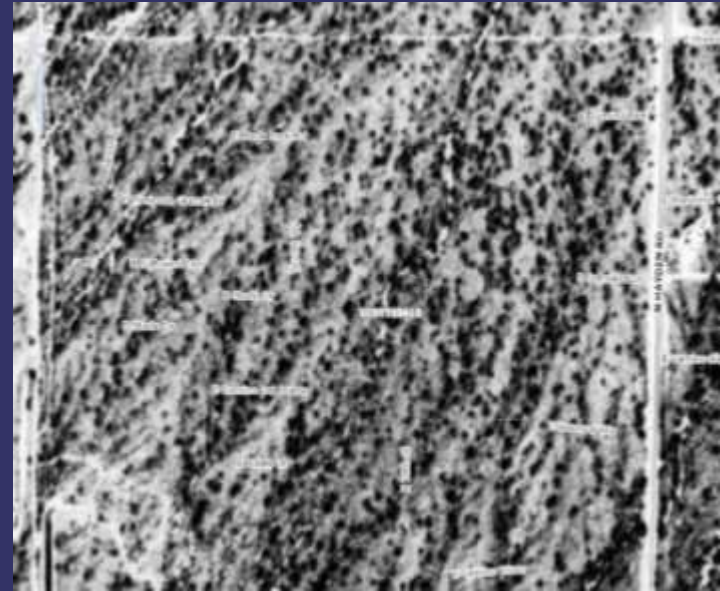




# Why study this area now?

- Dated flood studies
- Most floodplains delineated in late 1980's
  - Adopted in early 1990's
- Significant development since delineation
- Using updated technical information can better protect residents

Hayden & Pinnacle Peak 1993 & 2013



# Objective #1:

## Define Existing Flood Hazards and Risks

- Data collection
  - Public, Cities, Maintenance Crews
  - Photos, videos, and other flooding data
  - HOA meetings & individual meetings
  - Web-based tools

**Stagecoach Pass Wash July 31, 2007**



**ID Hazards**

**ID Problems**

**Develop Recommendations**

# Objective #1

## Community Data Collection

- Met with 13 homeowners associations
  - 112 residents
- 69 surveys via FloodTalk
  - Photos submitted via email and Report-A-Flood
- Individual meetings and site visits



January 2013

**ID Hazards**

**ID Problems**

**Develop Recommendations**

# Objective #1

## Define Existing Flood Hazards and Risks

- Develop new hydrology and hydraulic models
  - Latest technology
  - Updated survey and topographic mapping



**ID Hazards**

**ID Problems**

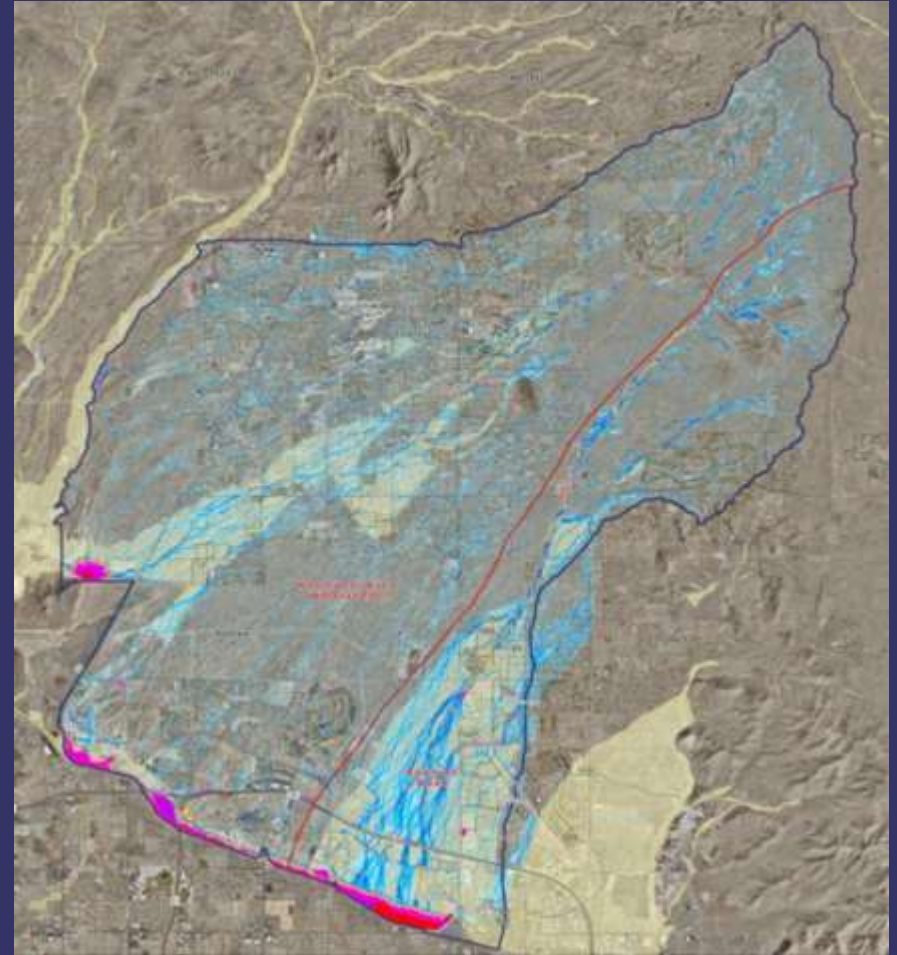
**Develop Recommendations**



# Objective #1: Hydrology and Hydraulic Model Results

## Three storms

- **5- 5.5 inches of rain**  
100 year storm (1% chance)
- **3-4 inches of rain**  
25 year storm (4% chance)
- **2.5-3 inches of rain**  
10 year storm (10% chance)



**ID Hazards**

**ID Problems**

**Develop Recommendations**

# Objective #1: Hydrology and Hydraulic Model Results

- Divided into 2 focus areas
  - Rawhide
  - Northwest Area Watershed
- Differences in:
  - Flooding hazards
  - Potential solutions



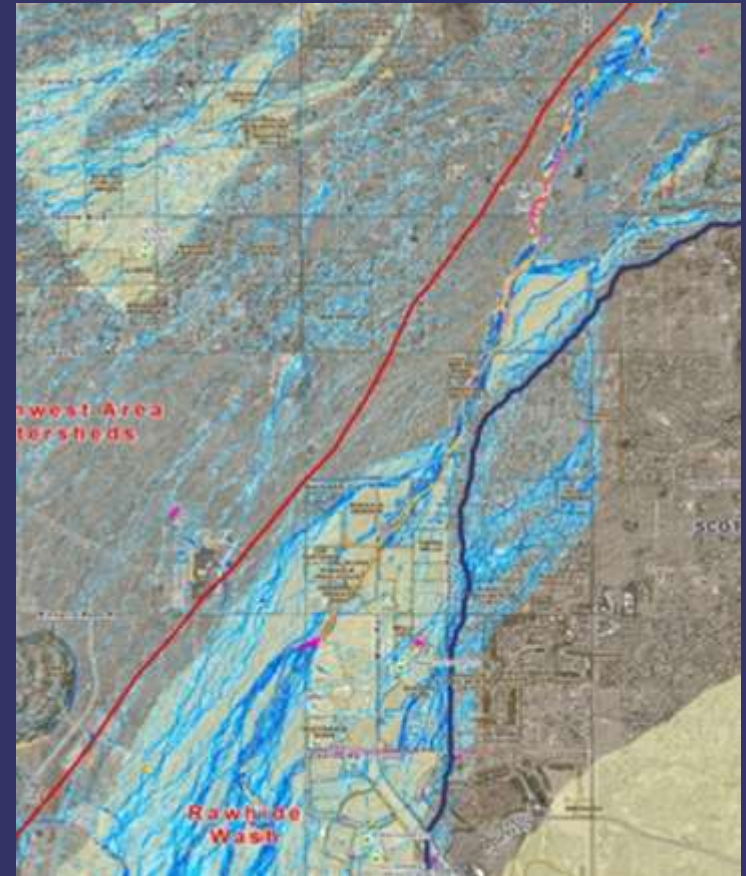
**ID Hazards**

**ID Problems**

**Develop Recommendations**

# Objective #1: Rawhide Wash Flood Hazards

- High Flows (9600 cfs)
- Active Alluvial Fan
  - Flow paths can change
  - High uncertainty
  - Structural solution is required to:
    - Mitigate the flood hazard
    - Revise the floodplain maps



## Objective #2:

### Identify the Flooding Problems and Issues

- Based on model results, data collection, public input
- Flooding Problems
  - Not all flooding hazards are problems
  - Areas with high flood risk
  - Public's perception and concerns



Street Flooding in Study Area

ID Hazards

ID Problems

Develop Recommendations



## Objective #2: Flooding Problems / Issues

- Potential risks to:
  - Houses
  - Roads
  - Pedestrians



**ID Hazards**

**ID Problems**

**Develop Recommendations**

## Objective #2:

# How tolerant are you of flooding risks?

- Tolerance Survey
  - Determine which problems the public wants fixed
- Tolerance to flooding scenarios
  - Nuisance
  - Possible action
  - Problem
- 110 responses



ID Hazards

ID Problems

Develop Recommendations

# Tolerance Survey Results

- **Street Flooding**

- Nuisance:

- Can still drive on road

- Possible Action:

- Road closed a few hours

- Problem:

- Road closed from more than a few days



# Tolerance Survey Results

- **Property Flooding**

- Nuisance:

- Water at edge of property

- Possible Action:

- Water up to front door

- Problem:

- More than 1" of water in home





# Next Steps: Rawhide Wash

- Develop alternatives
  - To mitigate the flood hazard
- Evaluate the advantages and disadvantages
  - Compare to the “No-Action” alternative
- Next Public Meeting: Early 2015
  - Public comment on conceptual alternatives
  - Input on evaluation criteria



# Summary

1. Purpose of study is to identify and reduce people's risk of flooding
2. In some areas, significant flood hazards do exist
3. This is a collaborative process
  - We want to continue to have your input on how problems are fixed



# Open House

- 6:45 to 8:00
  - Identify Problems and Issues
    - Maps
    - Laptops
    - Survey
  - Review Results
  - General Flooding Info
    - Exhibits
    - Cities
    - Floodplain Table

